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C. A. A. Helps Army Get 2,000 Flying Instructors

The Army Air Forces Flying Training Command has asked the Civil Aeronautics Administration to produce 2,000 instructors—1,000 elementary and 1,000 secondary—by June 15, and in order to do that, it will be necessary to get away from the airports and find pilots who are working elsewhere. Long ago, the C. A. A. scraped the bottom of the barrel of experienced pilots

Since this article was written and immediately before going to press, notice was received that the quota of flying instructors needed by the Army had been filled. Additional applicants are being placed on a reserve list for later call.

to make instructors out of them to take care of the expanding business of producing pilots in quantity. Having exhausted the supply of available pilots, it was necessary to take boys who had never flown before and train them first as pilots, then give them additional training until they were suitable instructor material.

Now the call is for all private pilots—all, that is, between the ages of 21 and 42—who can pass the physical requirements for a commercial pilot's license, and who have a reinstated pilot's license and airman identification card.

Some in Key Jobs

Many are working in jobs where they must not be disturbed, where their efforts are of such value to the war effort that they should not be transferred into

any other job. These would be pilots of the airlines, instructors already working for flight contractors in the C. A. A. program and in the Army flight training schools, personnel of the Army Contract Technical Schools, employees of the C. A. A., and certain civilians engaged directly in the war effort.

But there are other pilots about the country who might be serving their country better as instructors than in their present jobs. They might be the private fliers who have put their planes away for the duration of the war, and who have not the age nor the physical qualifications for combat duty, or whose positions in life justify deferment from military service.

While money is not all-important, the salaries being paid instructors are good. The average rate of pay is \$300 a month, and all flight contractors start their instructors at around \$200.

Check Personnel Lists

Manufacturers might well go over their personnel lists to find how many potential instructors are engaged at benches, drawing tables, or desks in their factories, and determine where these men will be of most value to their country. Airlines might find pilots in their ground personnel who are replaceable with older men, or women, and who could be released. Men in private business who can fly and who could instruct should take an inventory of their contribution to the war effort. Former graduates of C. A. A. pilot-training courses, unable to enlist in the air serv-

Notice

Effective with this issue, the Civil Aeronautics Journal will be published monthly instead of semimonthly. Subscribers at the former rate of \$1.00 a year will receive extensions of their present subscriptions to compensate for the difference in the number of issues. The new subscription rate will be \$0.50 a year (\$0.75 foreign).

This change is made to conserve paper and other material, and to reduce expenses. Official actions will be covered in the same manner as previously, but news items of general interest will be condensed. All the Journal features which have been found useful to the industry and to all persons directly concerned with aeronautics will be retained, except a few which might afford technical information of value to the enemy.

ees, could be fitted as instructors through these "refresher" courses which the C. A. A. will give.

Applicants should consult the nearest C. A. A. office. Following is a list of district representatives of the C. A. A. Pilot Training Program:

District Representatives

C. A. A. Pilot Training Program

PORTLAND, MAINE: Horace Milks, Administration Building, Municipal Airport.
WATERVILLE, N. Y.: Lyle Gadapee, Albany Airport.
BUFFALO, N. Y.: William Mason, Municipal Airport.
BURLINGTON, VT.: Robert H. Jones, Burlington Municipal Airport.
INSTITUTE, W. VA.: Leroy C. Weiland, Wert Field.
GARDEN CITY, L. I., N. Y.: John C. Seal, Hangar E, Roosevelt Field.
AMBLER, PA.: John S. Broome, Hangar Building, Wings Field.
NEW CUMBERLAND, PA.: Robert C. Howe, State Airport.

(See INSTRUCTORS, page 119)



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Lots of Paper Work

It takes 6,000 pounds of rag content bond to make enough blueprint paper to draw the plans for one pursuit ship.

Aeronautical Legislation

Listed below are recent measures concerning aeronautics pending before, or enacted by, Congress. A complete list of laws concerning aeronautics passed by the Seventy-Seventh Congress during the first session and pending measures carried over into the second session was printed in the March 1, 1942, issue of the Civil Aeronautics Journal. The compilation here brings the list up to date.

Bills Introduced

S. 2446—CADET ALLOWANCES (Reynolds); a bill to prescribe the pay and certain allowances for cadets of the United States Military Academy undergoing flight training and aviation instruction; referred to the Senate Committee on Military Affairs.
 H. R. 6945—CADET ALLOWANCES (May); a bill to prescribe the pay and certain allowances for cadets of the United States Military Academy undergoing flight training and aviation instruction; referred to the House Committee on Military Affairs.
 S. Res. 228—DEPARTMENT OF AVIATION (Wiley); a resolution for the establishment of a Department of Aviation; referred to the Committee on Commerce.
 S. Res. 239—MILITARY AVIATION (Wiley); a resolution for the establishment of a Senate Committee on Military Aviation; referred to the Committee on Rules.
 H. R. 7007—NAVAL AIRCRAFT (Vinson); a bill to authorize the construction or acquisition of additional naval aircraft; referred to the Committee on Naval Affairs.

Bills Passed

H. R. 6799—FLYING HOURS OF AIRLINE PILOTS (Lea); a bill to increase the monthly maximum number of flying hours of airline pilots, as limited by the Civil Aeronautics Act of 1938, passed by both Houses.
 H. R. 5695—AVIATION MECHANICS; a bill to amend the Civilian Pilot Training Act of 1939 so as to provide for the training of civilian aviation mechanics passed by the House, sent to the Senate, and referred to the Senate Committee on Commerce.

Resolution Adopted

S. Res. 228—AIRCRAFT PRODUCTION AND PLANS; a resolution requesting the Civil Aeronautics Board for a report on transport aircraft production since 1938 and plans for future development of the air-transport industry was agreed to.

Laws in Handy Form

In response to a number of inquiries, attention is called to the availability of a publication, AERONAUTICAL STATUTES AND RELATED MATERIAL, which has served as a handy reference book to persons in all branches of aeronautics. Its contents include the Civil Aeronautics Act of 1938, Reorganization Plans No. III and IV, the Air Commerce Act of 1926, and other material, both statutory and nonstatutory, relating to civil aeronautics. The book may be obtained from the Superintendent of Documents, Washington, D. C., for 15 cents.

Toothpaste Tube to Bomber

There is enough tin in 60 used toothpaste tubes to solder all the electrical connections in a medium-sized bomber.



Before any aircraft can be flown in air commerce it must hold an airworthiness certificate issued by the Civil Aeronautics Administration. The job of determining whether a particular aircraft, aircraft engine, propeller, or appliance is airworthy belongs to the Aircraft Engineering Division and the Flight Engineering and Factory Inspection Division of the C. A. A. The procedure described here is that normal to peacetime. It has been adapted to military needs, since the facilities of these C. A. A. divisions are now fully devoted to aiding the Army and the Navy in the Nation's war effort.

The proof of airworthiness is a long process, starting at the blueprint stage. Flight testing and factory inspection will be treated in future issues. Only the part with which the Aircraft Engineering Division is chiefly concerned is outlined here. This part includes the conduct of thorough engineering studies of the design of the aircraft, aircraft engine, propeller, or appliances. Extensive stress analyses of all elements of these units must be made, as well as static tests of certain vital portions of the structure. In the case of aircraft engines and propellers, the product undergoes grueling endurance tests.

All these painstaking investigations and studies of the structure of an airplane are made to insure as far as possible that no accidents in this type of plane will be caused by structural defects. However, the aircraft must still be flight tested to meet the safety standards set by the C. A. A.

The C. A. A. also issues type and production certificates to manufacturers. In order to obtain a type certificate for a particular model of aircraft, aircraft engine, propeller, or appliance, a manufacturer submits drawings, specifications, and static test reports for the unit to the Aircraft Engineering Division for examination. If the design is found to be satisfactory and the proof of adequate strength and endurance is satisfactory, either a type certificate is issued, or, in the case of an airplane, engineering inspection and flight tests are authorized. When a type certificate is issued to a manufacturer, it certifies that aircraft, engines, propellers, or appliances of the particular model in question, if constructed in accordance with the sealed drawings, are airworthy.

Issuance of a production certificate is up to the Flight Engineering and Factory Inspection Division, and will be discussed in a later issue of the Journal.

Baltimore Offers High School Course In Aeronautics

The Department of Education at Baltimore, Md., has started a course in aeronautics open to all high school seniors. This course, which is now in progress, is designed to prepare the individual to take the ground school examination of the Civil Aeronautics Administration. It covers Meteorology, Navigation, Civil Air Regulations, and General Servicing and Operation of Aircraft. Its purposes are stated as follows:

1. To create airmindedness on the part of our young people.
2. To provide general information regarding aeronautics and air travel.
3. To aid in the vocational guidance of high school students.
4. To give students essential knowledge regarding a growing industry into which many young men will enter.
5. To prepare students to take the C. A. A. Ground School Examination.

Classes are held twice a week, 3:30 to 5:00 p. m., and the course lasts a year. The Program of Study is outlined as follows: (1) History of aviation, (2) Aviation nomenclature, (3) Civil Air Regulations, (4) Airport traffic control procedures, (5) Air navigation, (6) Meteorology, (7) Theory of flight and aerodynamics, (8) Aircraft structures, (9) Aircraft power plants (10) Aircraft instruments, (11) Aircraft auxiliaries, (12) Parachutes, (13) Propellers, (14) Gliding, (15) Air transportation, (16) Opportunities in aviation.



CAP Courier Service Frees Army Pilots

The Civil Air Patrol of the Office of Civilian Defense has released regular Army pilots for more important duties by establishing a courier service along the East Coast, according to Earle L. Johnson, National Commander of the CAP.

During the first 20 days of operations, five Civil Air Patrol planes of the Pennsylvania Wing of CAP flew 2,277,000 pound-miles of cargo from Maine to Florida in 270 hours of flying time in an experiment to test the value of this service. The cargo included Army equipment and supplies urgently needed at Army air bases.

William M. Anderson, CAP Wing Commander of Pennsylvania, reported to National Commander Johnson that the service already has proved so successful that recommendations have been made to continue it on a permanent basis. Five CAP planes engaged in the work are based at the Harrisburg Airport. The ships used include one 165 h. p. Cessna; one 220 h. p. Waco; one 90 h. p. Stinson; one 75 h. p. Cub Cruiser; and one 65 h. p. Cub Coupe. The smaller planes are used for short flights with light loads, while the higher-powered planes fly long distances with loads up to several hundred pounds.

Before the experimental courier service was initiated, Army planes were

used for the transport of the material now being carried in the CAP planes.

Already 38,000 members have been enrolled in the Civil Air Patrol. With applications pouring in to the Wing Commanders in each of the 48 States, the test of the courier service indicates but one of the many functions the Civil Air Patrol is capable of performing, and thus relieving the Army air forces of many of the purely routine tasks with which it is now confronted, Commander Johnson said.

55 Suspensions, Revocations Bring Board Warning

"Flagrant violations of the Civil Air Regulations led to 55 suspensions and revocations of various types of pilot and mechanic certificates by the Civil Aeronautics Board during February and March 1942," the Board reports in a bulletin, part of which follows:

"It is extremely unfortunate that this unusually large number of suspensions and revocations is necessary at a time when every pilot and every plane is needed in cooperating with the war effort. As in the past, outstanding violations leading to drastic Board action included students carrying passengers, flying beyond limited operating bases, carrying passengers for hire, low aerobatics over congested areas and false entries recorded in log books. In one case the holder of a commercial pilot certificate with an instructor's rating flew dangerously near a convoy of Army trucks. In all of the cases, the violations were inexcusable.

"If civil flying is to continue in the United States, certificate holders must know and abide by the Civil Air Regulations."

Following are revocations and suspensions by classifications:

Revocations

Student Pilot Certificates	9
Private Pilot Certificates	5

Total	14
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Suspensions

Student Pilot Certificates	18
Private Pilot Certificates	14
Limited Com. Pilot Certificates	1
Commercial Pilot Certificates	6
Mechanic Certificates	2

Total	41
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115

March Record Shows 13 Fatal Accidents

There were 13 fatal accidents in non-air-carrier flying reported to the Safety Bureau for the month of March 1942. A pilot who apparently became lost and was preparing to make a precautionary landing, lost control of his aircraft during a turn at low altitude, fatally injuring both his passenger and himself. In another, a pilot was fatally injured

while landing when his aircraft was in collision with an Army aircraft. In the third, an instructor and his student were apparently executing a simulated forced landing when their airplane collided with telephone wires. Fatal injuries were sustained by both occupants.

A table showing the fatal accidents in February 1941 and 1942, and March 1941 and 1942, follows:

	Nonair carrier				Scheduled air carrier		Total
	Instructional	Pleasure	Commercial	No. details	Domestic	Foreign	
March 1942	1		2	10			13
March 1941	3	11		1			15
February 1942	3	3		3			6
February 1941	3	7	2		1		13

1. Investigator reports not yet received.



Shouting to People On Ground Cause Of Accidents

Following is the text of a safety bulletin issued by the Civil Aeronautics Board:

Do You "Broadcast" From Your Plane?

Are you the type of pilot who shouts to people on the ground?

Several accidents were reported to the Civil Aeronautics Board, Safety Bureau, during 1940 and 1941, in which fatalities occurred when pilots shouted to people on the ground. Lack of concentration on flying caused loss of control of the planes.

During this period, lack of flying concentration also caused several other serious accidents when pilots focused their entire attention on ground objects.

Concentrate on your flying but beware of the ground.

Don't try to shout to (or attract the attention of) friends on the ground.

Speed is your only salvation when you have little altitude to spare.

INDIVIDUAL ACCIDENT REPORTS

Seaplane Waterloops In Cross-wind Landing

A model S-38-B Sikorsky airplane received major damage in an accident which occurred on October 7, 1941, on Biscayne Bay, Miami, Fla. The aircraft was owned and operated by Pan American Airways, Inc., of New York. The ship was captained by Charles William Higgins, who held a commercial pilot's certificate with a rating to fly single-engine land aircraft up to 80 horsepower. He was also rated as a second pilot for scheduled air carrier operations. The acting copilot was Sidney Alison Adger, who also held a commercial pilot's certificate with the same ratings. The third member of the crew was another company employee, Mr. A. B. Steckevic, radio operator. None of the three was injured.

Pilots Higgins and Adger were practicing water landings on Biscayne Bay, with Higgins in command. In making a cross-wind landing, Higgins allowed the right wing to drop, and the right wing tip float struck the water with considerable force. The aircraft then waterlooped to the right.

The two pilots are designated by Pan American Airways, Inc., their employer, as junior pilots. Both had flown in the neighborhood of from 225 to 250 hours. The weather conditions at the time of the accident were good and the landing was made across a wind from the ESE of approximately 15 miles per hour velocity.

Probable cause.—Failure of the pilot to maintain control while making a cross-wind landing.

Contributing factor.—Inexperience of the pilot.

Flyer Falls From Plane As Belt Is Unfastened

An accident which occurred on November 27, 1941, at Houston, Tex., resulted in serious injuries to John R. Wilson. He held a commercial pilot certificate. His instructor, R. M. Loftis, who also held a commercial pilot certificate with an instructor's rating, was uninjured, and the aircraft, a model UPF-7 Waco, was undamaged.

Wilson and Loftis took off from the Alvin Airport, Alvin, Tex., about 10:45 a. m. to practice inverted flying. Loftis occupied the front of the two tandem seats and Wilson occupied the rear one; both had their safety belts fastened and both were equipped with parachutes. When the aircraft had attained the altitude of about five thousand feet Wilson executed several slow rolls and several snap rolls. All of these were performed without incident. The next maneuver was a left slow roll, and when the aircraft was completely inverted and about level laterally, Wilson fell out. He immediately opened his parachute and landed. A few seconds after Wilson had fallen out, Loftis realized that the ship was uncontrolled and immediately assumed control and finished the maneuver. He then sighted the opened parachute blow and after circling about it and ascertaining that Wilson was all right, landed back at the airport.

It was subsequently ascertained that the elastic which holds down the tongue of the safety belt latch was old and deteriorated. Its condition was such that it would have had little or no constraint on the latch tongue. It appears that Wilson, during the execution of the slow roll, which maneuver requires considerable control stick motion, had inadvertently tripped the safety latch with his elbow. His injury consisted of a fractured shoulder, sustained, so he states, by the abrupt opening of the parachute while he was falling head down; however, there appears to be a strong probability that this injury was

sustained by striking the cockpit edge or the windshield as he fell out.

Probable cause.—Wilson's inadvertent unfastening of his safety belt during inverted flight.

Low Acrobatics End In Fatal Stall, Spin

An accident which occurred about noon on February 5, 1942, at Crudup, Ala., resulted in fatal injuries to Robert Jackson Newton and Fred Richard Rinehart. Newton, the pilot, held a commercial certificate with a rating to fly single engine land airplanes of up to 80 h. p. and an instructor's rating. He had flown a total of about 385 hours. Rinehart was uncertified. The aircraft, a model J3F-65 Piper, was demolished.

The pilot, accompanied by the passenger, took off at about 11:40 a. m. from the Gadsden Airport, Gadsden, Ala. A few minutes later, the aircraft was observed flying at low altitude over the town of Crudup, a few miles from the airport. Witnesses observed one complete loop being made and then another maneuver which appeared to be an Immelman turn; both maneuvers were completed at an altitude no greater than 400 feet. The aircraft made a 180-degree left turn over the local schoolhouse and was then dived at a very steep angle, followed by an extremely sharp climb. At the peak of the climb the aircraft stalled and started a right-hand spin, falling through two high tension lines to the ground.

Investigation revealed no indication of any malfunctioning of the aircraft or any of its components, nor any lack of fuel. The dual controls had been installed and operative. Investigation also disclosed that the pilot was acquainted with a young lady who taught school at the school building over which the acrobatics had been performed. It was reported that he had, on one other occasion, flown over this schoolhouse in a similar fashion.

Probable cause.—Low altitude acrobatics terminating in a stall and spin from which recovery was not effected.

Low Altitude Maneuver Results in 2 Deaths

An accident which occurred at Knoxville, Tenn., on November 16, 1941 resulted in fatal injury to the two occupants of a Luscombe 8-A. The pilot, Sam C. Cooper, held a student certificate. His log book could not be located, but the available records indicated that since September 18, 1941, he had received 9 hours and 10 minutes dual instruction and had flown approximately 13 hours solo. Albert Jones, the passenger, held no type of airman certificate. The aircraft was demolished.

Pilot Cooper rented the plane at the Municipal Airport, Knoxville, and had the tank filled to capacity. Accompanied by the passenger, he took off about 11:00 a. m. Shortly thereafter people

(See ACCIDENTS, page 123)

Airport Management Forum

Emergency Repair Cable for Boundary Lights Explained

In an earlier Management Forum, John H. Tweed, manager of the Municipal Airport at New Haven, Conn., said he would like to have the benefit of other managers' experience in locating breaks in high tension underground cables. Following is a brief description of a method recommended by the Airport Division of the Civil Aeronautics Administration for locating a break in a series boundary light circuit and providing continuous operation during repair. A similar arrangement for contact lights is being worked out.

The quickest and simplest means of locating a faulty cable, according to the C. A. A. Airport Division, is to use an emergency cable and plug set similar to the one illustrated here. This is plugged in from one light to the next until the circuit has been reestablished, which is indicated by the lighting of the boundary lights. This cable and plug set has the added advantage of serving as a temporary operational unit until the cable has been repaired.

It is recommended that emergency repair plugs and cable be provided at every airport to make necessary connections between the two boundary lights where the defective cable exists. These repair plugs consist of galvanized iron housings, each enclosing a series plug and receptacle which is readily inserted in the plug and receptacle of the bound-

ary light so that temporary connections can be made quickly.

The emergency repair cable entrance is made watertight by means of a cable connector in the side of the repair plug housing. The repair cables should be kept indoors on portable reels (similar to garden hose reels) when not in use. These repair cable and plug sets are now obtainable from several manufacturers of airport lighting equipment.

A typical installation of one of these emergency repair cable and plug sets is shown in the accompanying illustration (C. A. A. Airport Division Drawing No. 331), which also shows a schematic wiring diagram illustrating how the defective cable is isolated by the use of this emergency repair cable and plug set.

Filing of Arrival Notices Discussed

A question as to the filing of arrival notices on local flights has been raised by Prince Woodberry, Manager of the Municipal Airport at Beverly, Mass. Here is part of his letter:

"The question I would like to see discussed pertains to the necessity of making out Form ACA 959 'Arrival Notice' on all strictly local flights entirely within the airport zone, realizing that provision has been made whereby one clearance and one arrival notice will suffice for one or more flights in the same aircraft as long as the same pilot is in charge.

"As I see it, the present system of records was devised largely from the

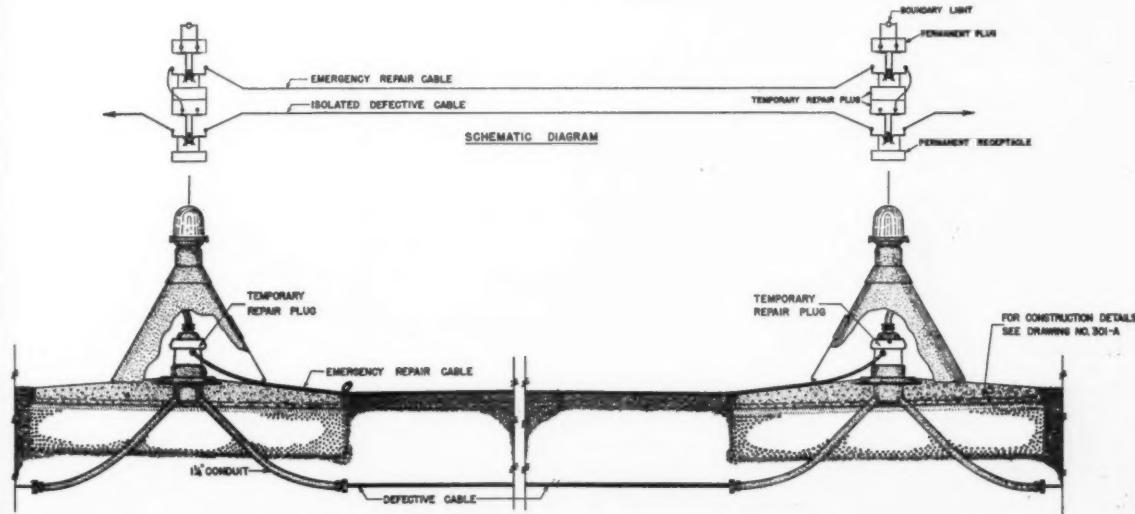
standpoint of controlling and recording the movements of aircraft from and to designated landing areas, or in other words cross-country flights, and for this purpose it should prove satisfactory. From our experience, however, the proportion of these flights is very low in relation to the number of local flights, in our case only about five in every hundred, and I believe this ratio will hold good in most of the smaller airports along the coast line.

"Frankly I believe that an exception should be made regarding the filing of arrival notices on local flights. Inasmuch as pilots sign in and out on the airport register and receive a copy of Form 958 'Airport Clearance' before making even a local flight, it would seem that if they surrendered their copy of the clearance sheet on completion of their flight to the clearance officer in charge, who could note thereon the time of arrival, that this would be sufficient. If desired a stamp could easily be made to stamp these sheets having spaces for the pilots' and clearance officers' signatures, time of arrival, etc. They could then be filed in the same manner as the arrival notices and the system of records would be as complete as at present and at the same time an appreciable saving in time and money would result."

Statement by C. A. A.

Following is a statement from the General Inspection Division of the C. A. A. outlining the method now established for handling aircraft clearances

(See ARRIVAL NOTICES, next page)





Order Spreads Mail Load of Airlines

The Civil Aeronautics Board has issued orders which will permit the Post Office Department to use all airline schedules for the transportation of mail. Heretofore mail was flown on only certain schedules with a specific rate per airmail mile. The Board's orders fixed the rates per mile on a sliding scale to provide for the use of these additional schedules which will not substantially change the total compensation now paid to the various carriers.

Spreading the mail load over additional schedules, rather than concentrating it on a limited number, is expected to be advantageous to the carriers as well as the Postal Service.

These orders affect all domestic air carriers with the exception of American Airlines and Continental Air Lines, whose rates have already been fixed on this basis, and Eastern Air Lines whose rate proceeding is now pending before the Board.

Raise in Mid-Continent Rates Proposed

The Civil Aeronautics Board proposes to raise the mail rates of Mid-Continent Airlines, Inc., according to a statement of tentative findings and conclusions. A system rate of 41.83 cents per airplane mile is proposed and would allow the Company approximately \$180,000 per year increase in mail revenue, the Board said. About \$60,000 in retroactive pay would be designated to cover the period from December 30, 1941, the date upon which the proceeding was started, until the rate order becomes effective.

Mid-Continent Airlines, according to a Board order, is allowed 20 days in which to file notice of any objections it may have to the tentative findings of the Board in regard to its rates, and 15 additional days are allowed for the filing of written answer and any supporting documents.

Delta Mail Rates Affirmed by Board

The Civil Aeronautics Board has announced affirmation of its opinion given January 29, 1942, in which it fixed the rate of mail pay for Delta Air Corporation's routes 24 and 54.

The order of January 29, 1942, stated that effective February 10, 1942, the company will receive 24 cents per airplane mile on its Fort Worth-Atlanta-Charleston; Atlanta-Augusta-Savannah, and Atlanta to Cincinnati routes.

Rates fixed by the Board will result in an increase in mail compensation to Delta of approximately \$300,000 per year. Over three-fourths of this income results from the Atlanta-Cincinnati and Augusta-Savannah runs, inaugurated April 15, 1941, and May 1, 1941, respectively, on which no previous rates had been fixed.

The case was reopened on petition of the Post Office Department which claimed that the prospective net income allowed by the rate was excessive, and that in determining the rate the Board's allowance for expenses incurred in non-mail services performed by the carrier was not proper.

Temporary Certificate Issued to American

The Civil Aeronautics Board has issued a temporary certificate of public convenience and necessity to American Airlines, Inc., authorizing the company to carry passengers, mail, and express between the terminal points El Paso, and Fort Worth-Dallas, Tex., and Mexico City, Mexico. Monterrey, Mexico, was named as an intermediate point on the route. The temporary certificate, approved by President Roosevelt, is to remain in effect until the Board shall determine that the need for the service, in the interest of national defense, has terminated.

At the same time the Board deferred action on proceedings instituted by it to determine whether the cities of Laredo, Eagle Pass, and San Antonio, Tex., should be included in the authorization granted to American and directed that the application of American for approval of its acquisition of control of American Airlines de Mexico, S. A., be dismissed for lack of jurisdiction.

Arrival Notices

(Continued from preceding page)

and arrival notices and answering in part Mr. Woodberry's question:

"Our instruction to all Registrar and Clearance Officers permit the issuance of an aircraft clearance for a particular aircraft operated by a particular pilot at the beginning of his operation in the morning. This same clearance may be carried by him throughout the entire

Aviation Liability Study Postponed

The Civil Aeronautics Board has postponed indefinitely consideration of the aviation liability legislation problem which has been under investigation by its staff.

A report to the Board of a Study of Proposed Aviation Liability Legislation, prepared by Mr. Edward C. Sweeney, was released in June of 1941. The Board at that time suggested that interested persons submit their comments and criticisms of the report. A number of these comments have been received, but it is felt that response to the Board's request has been retarded because of the preoccupation of the aviation industry with the more pressing problems of the present war.

In view of these circumstances, and because of the press of its other business more directly related to the war effort, the Board feels that it should not give consideration to the problem of aviation liability at the present time. Consideration of the matter, the Board said, would be resumed at such time as may be appropriate in the light of future developments.

- Keep 'Em Flying -

Designation of Medical Examiners

During the month of March 1942, the following-named physicians were officially authorized to make physical examinations for the Administration.

ARKANSAS—Dr. Thomas N. Black, Medical Arts Building, Hot Springs.

FLORIDA—Dr. Robert L. Miller, 258½ South Beach Street, Daytona Beach; Dr. Lawrence L. Stepp, 809 Sweet Building, Fort Lauderdale.

KANSAS—Dr. Lettie Lewis, 207½ North Main Street, McPherson.

MINNESOTA—Dr. Jan Henrik Tillisch, 102 Second Avenue, SW., Rochester.

NEW YORK—Dr. Anthony J. Morreale, 9 Grove Street, Middletown.

TEXAS—Dr. Ralph H. Eisaman, 754 Levee Street, Brownsville.

Examinations Discontinued

The following physicians are no longer making examinations for the Administration.

Dr. Jett Scott, Hot Springs, Ark.
Dr. J. Raiston Wells, Daytona Beach, Fla.
Dr. Paul G. Shell, Fort Lauderdale, Fla.
Dr. Frederick C. Mayne, Cheboygan, Mich.
Dr. William R. Lovelane, Rochester, Minn.
Dr. F. H. Herrington, Middletown, N. Y.

day's operation and canceled by a single arrival notice at the termination of his operation. Under this method the clearance is valid only in that particular aircraft and provided the pilot to whom the clearance was issued maintains an accurate record of any change of passenger or student occupants (usually kept on the reverse side of the clearance form) which is submitted to the Registrar and Clearance Officer at the end of the day's operation."

Aircraft Production Schedules Being Met, Nelson Declares

The nation's aircraft manufacturers are meeting the "impossible" production schedules adopted after Pearl Harbor, according to a recent statement of Donald M. Nelson, Chairman of the War Production Board. Excerpts from his address to the Military Order of the World War follow:

The airplane production program adopted after Pearl Harbor was presumed by practically everyone to be bigger than could possibly be attained. It was an "impossible" program if there ever was one. We met our schedules in January and we made 23 percent more planes than we had made in December. We exceeded our schedules in February which, of course, called for an increase over January. In March again we met the schedule which increases in line with the President's objective.

Yet this is no time for easy optimism. Measured by any ordinary standard, this Nation has done extremely well; but we aren't measuring by ordinary standards any more. Instead, we are measuring our performance against the greatest emergency the country has ever faced. What would be superlative performance at any other time could easily turn out to be short of the goal we must reach. It has been said often, but we must continue to say it—no matter how well we are doing, we must do even better.

New Aeronautical Publications

Among recent government publications dealing with the subject of aeronautics are the following:

ANNUAL REPORT OF CIVIL AERONAUTICS BOARD: June 30, 1941; 62 pages, maps. Price 35 cents. Classification number C 31.201: 941.

ANNUAL REPORT OF SECRETARY OF COMMERCE (including Civil Aeronautics Administration); June 30, 1941; 180 pages, illustrated. Price 30 cents. Classification number C 1.1: 941.

ANNUAL REPORT OF THE NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS; 1941; 14 pages, illustrated. Price 10 cents. Classification number Y 3.N 21/5: 1/941-1.

AIRCRAFT MECHANICS; 1942; Hearing, 77th Congress, 1st session, on H. R. 5695 to amend the Civilian Pilot Training Act of 1939 so as to provide for the training of civilian aviation mechanics, December 8, 1941. 35 pages. (Interstate and Foreign Commerce Committee, House) Price 10 cents. Classification number Y 4.In 8/4: A1 7/9.

ARMY TECHNICAL MANUAL 1-405; Aircraft engines. Dec. 9, 1941. 81 pages illustrated. Price 15 cents. Classification number W 1.35: 1-405.

When ordering these publications, send remittance by postal money order, express order, coupons, or check to the Superintendent of Documents, Government Printing Office, Washington, D. C. Always give title, issuing office, or classification number when listed.



New Models Added to Old Type Approvals

(Approval numbers and dates of approval of new models in parentheses)

Aircraft

Fairchild M-62A-3, 2 place open land monoplane. Engine, Ranger 6-440-C5. (Type Certificate No. 724, 49-42.)

Taylorcraft DCO-65 (Army O 57A). 2 place closed land monoplane. Engine, Continental A-65-8. (Type Certificate No. 746, 2-24-42.)

Engines

Aircooled Motors, Franklin 4AC-176-BA3, 4 cyl. horizontal opposed air cooled, 65 hp at 2300 rpm at sea level pressure altitude. Provides for use of electric Auto-Lite generator, starter and AC fuel pump at additional weight of 38 lbs. (Type Certificate No. 221, 4-1-42.)

Aircooled Motors, Franklin 6AC-298-E2, 6 cyl. horizontal opposed air cooled, 130 hp at 2450 rpm at sea level pressure altitude. Provides for use of AC fuel pump. (Type Certificate No. 225, 4-1-42.)

Propellers

Sensenich, 74FE, wood, 6 ft. 2 in. diameter, 4 ft. 4 in. to 3 ft. 10 in. pitch, 100 hp, 2550 rpm. (Type Certificate No. 765, 3-20-42.)

Instructors

(Continued from page 113)

PITTSBURGH, PA.: Fred E. Ennis, Allegheny County Airport.

ROCKVILLE, MD.: E. W. Robertson, Congressional Airport, P. O. Box 232.

CHARLOTTE, N. C.: Roland C. Newman, Administration Building, Douglas Municipal Airport, P. O. Box 974.

JACKSONVILLE, FLA.: John Merrit, Administration Building, Municipal Airport.

BIRMINGHAM, ALA.: William E. Feast, Municipal Airport.

JACKSON, MISS.: William F. Sylvester, City Auditorium.

NASHVILLE, TENN.: Chadwell Bridges, Aviation Administration Building, Berry Field.

FARGO, N. DAK.: Roy E. Peterson, 621 First Avenue, Room 211.

MINNEAPOLIS, MINN.: George Holey, Wold Chamberlain Field, Administration Building.

CUDAHY, WIS.: Carl E. Van Dyke, Administration Building, Milwaukee County Airport.

JOLIET, ILL.: Hubert C. Patrick, Administration Building, Joliet Municipal Airport.

PEORIA, ILL.: Elmer E. Clark, Hangar No. 1, Peoria Municipal Airport.

INDIANAPOLIS, IND.: Richard F. O'Connell, Roscoe Turner Aeronautics Corporation, Municipal Airport.

PORT COLUMBUS, OHIO: William M. Brown, Rooms 206, 208, 209, Administration Building.

CLEVELAND, OHIO: Harold G. Myers, Aeroways, Inc., Cleveland Municipal Airport.

LANSING, MICH.: Allen W. Devoe, Room 4, Administration Building, Capitol City Airport.

DALLAS, TEX.: Edward E. Bartholomew, Room 231, Administration Building, Love Field.

AMARILLO, TEX.: John K. Lyle, Post Office Box 1228, English Field.

OKLAHOMA CITY, OKLA.: Maxwell E. Pitcher, P. O. Box No. 5098, Farley Station.

LITTLE ROCK, ARK.: Guy Tharburn Mann, 328 P. O. Building.

HOUSTON, TEX.: D. C. McPherson, P. O. Box 2594, Municipal Airport.

Price Change Speeds Plane Engine Output

By approving a small increase in the maximum price for a machine tool used to make airplane engine piston rings, Price Administrator Leon Henderson has cleared the way for production by subcontractors of 150 additional urgently needed units.

Amendment No. 6 to Revised Price Schedule No. 67—New Machine Tools—authorizes an increase from \$7,025 to \$7,290 each, or slightly less than 3.8 percent in the price of 150 Model No. 26 Hyprolap Machines in order that the Norton Company, of Worcester, Mass., can arrange to subcontract for the immediate production of these machines. The Army Air Corps at Wright Field and the War Production Board had requested the Norton Co. to arrange for increased production by subcontracting.

Since neither the Norton Co. nor Denison Manufacturing Co., which already has been making No. 26 Hyprolaps under a subcontract, is able to increase production of the machines, further subcontracting is necessary. The OPA-approved price increase allows Norton to recover additional costs in the production and sale of these 150 units.

The amendment requires Norton to file with OPA the name and address of each subcontractor undertaking to produce the additional machines; the serial number of each machine; and a statement of sums expended for new patterns, jigs, fixtures, and tools.

SAN ANTONIO, TEX.: George Follett, P. O. Box 2340, Stinson Field.

ALBUQUERQUE, N. MEX.: Richard Scholtz, 2910 East Central Avenue.

KANSAS CITY, MO.: Frank L. Jones, 120 Richards Road, Municipal Airport.

ST. LOUIS, MO.: David L. Baker, Box 127, Lambert Field Branch.

DES MOINES, IOWA: Paul C. Cannon, Room 207-A, Old Federal Building.

CHEYENNE, WYO.: Donald Mason, Municipal Airport.

LINCOLN, NEBR.: Robert E. Heidel, 726 Terminal Building, 921 O Street.

WICHITA, KANS.: George R. Mahncke, Municipal Airport.

DENVER, COLO.: Ralph D. Thissell, Administration Building, Municipal Airport.

TUCSON, ARIZ.: Alfred J. Dewey.

BISHOP, CALIF.: Robert C. Boone, 2d Floor, Joseph Building.

RENO, NEV.: Robert Trennert, Reno Sky Ranch.

SALT LAKE CITY, UTAH: M. E. Beeman, Salt Lake Municipal Airport.

KINGMAN, ARIZ.: Jack Gale Webb, Chamber of Commerce Building.

SPOKANE, WASH.: Lewis S. Becker, Felts Field.

HELENA, MONT.: Charles W. Cross, Municipal Airport.

BOISE, IDAHO: Albert H. Lane, 326 Capital Securities Building.

YAKIMA, WASH.: Charles E. Mears, 1014 Larson Building.

CIVIL AERONAUTICS BOARD OFFICIAL ACTIONS

Abstracts of Opinions, Orders, and Regulations

ORDERS

ORDER No. 1641 *April 1, 1942*

Revoked student pilot certificate No. S-282918, held by Edward Paul Sills, for piloting an aircraft on a civil airway carrying a passenger other than a certificated instructor and other violations of the Civil Air Regulations.

ORDER No. 1642 *April 1, 1942*

Adopted an order fixing and determining the fair and reasonable rates of compensation for the transportation of mail by United Air Lines Transport Corp. over route No. 57. (Opinion and order—Docket No. 603)

ORDER No. 1643 *April 1, 1942*

Granted Pan American Airways, Inc., special permission to transport the Governor of Trinidad, British West Indies, and two members of his official family from Port of Spain, Trinidad, to New York, N. Y.

ORDER No. 1644 *April 2, 1942*

Authorized United Air Lines Transport Corp. to inaugurate nonstop service between Oakland, Calif., and (1) Reno, Nev., (2) Salt Lake City, Utah (3) Sacramento, Calif. (4) Monterey, Calif. and (5) Los Angeles, Calif., points on routes Nos. 1 and 11, on April 1, 1942.

ORDER No. 1645 *April 6, 1942*

Suspended for 6 months student pilot certificate No. S-206751 held by Frank J. Bartek, for piloting an aircraft on a civil airway carrying a passenger other than a certificated instructor in violation of the Civil Air Regulations.

ORDER No. 1646 *April 6, 1942*

Amended Order Serial No. 1134 to allow Adolph Charles Gropper to apply for any type of pilot certificate after April 1, 1942.

ORDER No. 1647 *April 6, 1942*

Suspended for 10 days the flight instructor rating held by Ronald Francis Anderson for piloting an aircraft closer than 500 feet vertically and 2,000 feet horizontally to a cloud formation and other violations of the Civil Air Regulations.

ORDER No. 1648 *April 6, 1942*

Dismissed the complaint filed by the Administrator of Civil Aeronautics alleging violations of the Civil Air Regulations by Glenn E. Moon. (Opinion and order.)

ORDER No. 1649 *April 6, 1942*

Adopted an order fixing and determining the fair and reasonable rates

of compensation for the transportation of mail by Continental Air Lines, Inc. (Opinion and order—Docket 670.)

ORDER No. 1650 *April 6, 1942*

Granted the petition of American Airlines, Inc., for reconsideration and reargument in the proceeding to determine fair and reasonable rates of compensation for its transportation of mail, denied request that petition operate as a stay of the effective date of the order of the Board, and took under advisement request for rehearing.

ORDER No. 1651 *April 7, 1942*

Directed Mid-Continent Airlines to show cause why the Board should not make final the findings and conclusions set forth in the Statement of Tentative Findings and Conclusions, dated April 7, 1942, and upon the basis thereof, fix, determine and publish the rates set forth in said Statement as the fair and reasonable rates of compensation for the transportation of mail over routes Nos. 26 and 49. (Order and Statement.)

ORDER No. 1652 *April 8, 1942*

Suspended for 30 days private pilot certificate No. 50934-41 held by Edward H. Hahn for piloting an aircraft on a civil airway carrying a passenger when the dual controls of the aircraft had not been made inoperative and when neither he nor the passenger were properly certificated to operate said aircraft in violation of the Civil Air Regulations.

ORDER No. 1653 *April 8, 1942*

Suspended for 15 days student pilot certificate No. S-289880 held by H. C. Koontz for piloting an aircraft at an altitude of less than 500 feet over open country in violation of the Civil Air Regulations.

ORDER No. 1654 *April 8, 1942*

Suspended for 90 days private pilot certificate No. 65553 held by William Gonzales for piloting an aircraft at an altitude of less than 1,000 feet over a congested area and other violations of the Civil Air Regulations.

ORDER No. 1655 *April 8, 1942*

Revoked student pilot certificate No. 338653 held by John Locke Warren for piloting an aircraft on a civil airway while not the holder of a valid pilot certificate and other violations of the Civil Air Regulations.

ORDER No. 1656 *April 8, 1942*

Suspended for 6 months student pilot certificate No. S-233796 held by William Mambourg for piloting an aircraft on a civil airway after sunset when the

aircraft was not equipped with navigation lights in violation of the Civil Air Regulations.

ORDER No. 1657 *April 8, 1942*

Suspended for 30 days the flight instructor rating held by Thomas Davis Speight for certifying as correct certain flight time entries in the log book of a student pilot when these entries were inaccurate.

ORDER No. 1658 *April 9, 1942*

Granted Pan American Airways, Inc., permission to serve Port-au-Prince, Haiti, through the use of Bowen Field and to serve Paramaribo, Surinam, through the use of Zandery Field.

ORDER No. 1659 *April 9, 1942*

Granted American Export Lines, Inc., permission to intervene in the application of American Export Airlines, Inc., for approval of the control of American Export Airlines, Inc., by American Export Lines, Inc.

ORDER No. 1660 *April 10, 1942*

Authorized United Air Lines Transport Corp. temporarily to suspend service at Rock Springs, Wyo.

ORDER No. 1661 *April 10, 1942*

Revoked private pilot certificate No. 27154 held by William Fisher Kohl for piloting an aircraft on a civil airway without having received prior clearance to take off.

ORDER No. 1662 *April 10, 1942*

Dismissed complaint filed by the Administrator of Civil Aeronautics alleging that James Eugene Murphy had committed certain acts which demonstrated a lack of good moral character and a temperamental unfitness to remain the holder of a pilot certificate. (Opinion and order.)

ORDER No. 1663 *April 10, 1942*

Suspended for 90 days private pilot certificate No. 140361 held by Frederic Karoly, for piloting an aircraft exceeding the gross weight limitation prescribed by the airworthiness certificate and the operation record issued, and other violations of the Civil Air Regulations. (Opinion and order.)

ORDER No. 1664 *April 11, 1942*

Granted several airlines permission to intervene in the matter of certain activities of Universal Air Freight Corp.

ORDER No. 1665 *April 13, 1942*

Revoked student pilot certificate No. S-352674 held by Adolph Brocato for

piloting an aircraft carrying passengers while not possessed of any valid pilot certificate in violation of the Civil Air Regulations.

ORDER No. 1666. *April 13, 1942*
Revoked student pilot certificate No. S-228847 held by Jay B. Hamlett for piloting an aircraft on a civil airway carrying a passenger other than a certificated instructor and other violations of the Civil Air Regulations.

ORDER No. 1667. *April 13, 1942*
Revoked private pilot certificate No. 98562-41 held by Vincent John McInnis for piloting an aircraft on a civil airway at an altitude of less than 1,000 feet over a congested area and other violations of the Civil Air Regulations.

ORDER No. 1668. *April 13, 1942*
Amended the order, as amended (Serial Nos. 244, 875, and 1240), instituting a general investigation and hearing in the matter of contracts between Railway Express Agency, Inc. and various air carriers, so as to include additional contracts entered into by Railway Express Agency, Inc., and Northeast Airlines, Inc., and Central Vermont Airlines, Inc.

ORDER No. 1669. *April 13, 1942*
Denied motion of Western Air Lines, Inc., that steps be taken to make of record in the hearings on the applications of West Coast Airlines, Inc., Southwest Airways Co., Western Air Lines, Inc., and United Air Lines Transport Corp. for temporary or permanent certificates of public convenience and necessity authorizing scheduled air transportation of mail and property by the pickup method what part of the services proposed may be of special significance to the military services or desirable for purposes of national defense.

ORDER No. 1670. *April 15, 1942*
Revoked student pilot certificate No. 283526 held by C. E. Brearley for piloting an aircraft on a civil airway carrying a passenger other than a certificated instructor and other violations of the Civil Air Regulations.

ORDER No. 1671. *April 15, 1942*
Suspended for 30 days student pilot certificate No. S-302053 held by Gerald P. Abler for piloting an aircraft on a civil airway at an altitude of less than 1,000 feet when the ceiling was not sufficient to permit flight at the minimum altitude and other violations of the Civil Air Regulations.

ORDER No. 1672. *April 15, 1942*
Suspended for 90 days private pilot certificate No. 146046 held by Roy W. Huddleston for piloting an aircraft outside of a control zone at an altitude of less than 500 feet and other violations of the Civil Air Regulations.

ORDER No. 1673. *April 15, 1942*
Suspended for 15 days mechanic certificate No. 5569 for demonstrating negligence, and a wilful disregard of his duties in that he signed approximately 13 daily flight inspection record forms in blank for future use in the C. P. T. Program.

MAY 15, 1942

Opinion Available

Civil Aeronautics Board Opinion No. 54 of Volume 2 is now available in printed form as an advance sheet. Its title is *BRANIFF AIRWAYS, INC., ET AL.—CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY (Kansas City-Wichita-New Orleans Service)*, Docket No. 192.

Copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., for 10 cents each. When ordering, include the opinion serial number and the docket number as well as the opinion title.

With this issuance, all 64 opinions scheduled for inclusion in Volume 2 are in printed form. Preparation of a bound volume is under way, but it is impossible to state when this will be available because of the greatly increased burden of war work imposed on the Government Printing Office. The bound volume of C. A. A. Reports—Volume 1 is delayed for the same reason.

ORDER No. 1674. *April 16, 1942*
Granted Eastern Air Lines, Inc., permission to inaugurate on April 16, 1942 nonstop service between Montgomery, Ala., and Atlanta, Ga., on Route No. 5.

ORDER No. 1675. *April 14, 1942*
Granted application of American Airlines, Inc., for a temporary certificate of public convenience and necessity to engage in air transportation between El Paso and Fort Worth-Dallas, Tex.; dismissed its application for approval of the acquisition by it of American Airlines de Mexico, S. A.; and deferred decision in the proceedings instituted by the Board to determine whether the public convenience and necessity require air transportation to and from Laredo, Eagle Pass, and San Antonio, Tex. (Opinion and order—Docket Nos. 510, 662, 663, 672, and 706.)

ORDER No. 1676. *April 18, 1942*
Amended Order Serial No. 1657 so as to commence period of suspension of commercial pilot certificate No. 32214 held by Thomas Davis Speight on October 18, 1942.

ORDER No. 1677. *April 18, 1942*
Suspended commercial pilot certificate No. 32359 of Ralph H. Barry for 60 days for piloting aircraft without having obtained clearance for flight and other violations of the Civil Air Regulations.

ORDER No. 1678. *April 18, 1942*
Revoked Order Serial No. 1640 and authorized Pennsylvania Central Airlines Corporation to suspend service temporarily on route No. 41.

ORDER No. 1679. *April 20, 1942*
Suspended for 60 days private pilot certificate No. 45396-40 of Russell Edgar Andrews, Jr., for carrying a passenger in a control seat without the dual

controls having been made inoperative, and other violations of the Civil Air Regulations.

ORDER No. 1680. *April 20, 1942*
Amended Order Serial No. 1295 so as to allow Ernest A. Williams to apply for any type of pilot certificate.

ORDER No. 1681. *April 20, 1942*
Revoked student pilot certificate No. S-240882 of Frank Edward Carney for carrying a passenger other than a certificated instructor, in violation of the Civil Air Regulations.

ORDER No. 1682. *April 20, 1942*
Amended Order Serial No. 1591 so as to grant the request of the City of St. Paul for permission to withdraw its opposition to any right to question, at a later date, the legality of the action of Northwest Airlines regarding service to St. Paul.

ORDER No. 1683. *April 21, 1942*
Temporarily exempted Pan American Airways, Inc., from the provisions of section 401 (a) of the Civil Aeronautics Act so as to authorize air transportation to and from Ciudad Trujillo, Dominican Republic, as an intermediate point between Miami, Fla., and San Juan, Puerto Rico.

ORDER No. 1684. *April 21, 1942*
Granted permission for Pan American Airways, Inc., to serve Ciudad Trujillo, Dominican Republic, immediately, through the use of the Miraflores Airport.

ORDER No. 1685. *April 22, 1942*
Revoked private pilot certificate No. 75424-41 of Paul F. McBride for operating an aircraft between the hours of sunset and sunrise without being equipped with proper navigation lights, and other violations of the Civil Air Regulations.

ORDER No. 1686. *April 22, 1942*
Suspended for 90 days private pilot certificate No. 56130 of Mike B. Priebe for carrying passengers for hire and other violations of the Civil Air Regulations.

ORDER No. 1687. *April 22, 1942*
Temporarily adjusted rate of compensation for the transportation of mail by Transcontinental & Western Air, Inc., on Route No. 2.

ORDER No. 1688. *April 24, 1942*
Suspended for 30 days aircraft and aircraft engine mechanic certificate No. 14491, held by Thomas F. Wilson, for signing periodic inspection reports for aircraft when he did not inspect such aircraft, in violation of the Civil Air Regulations.

ORDER No. 1689. *April 24, 1942*
Suspended for 6 months student pilot certificate No. S-181037, held by Charles Swiencicki, for piloting an aircraft at an altitude of less than 1,000 feet over a congested area and other violations of the Civil Air Regulations.

ORDER No. 1690 *April 24, 1942*

Revoked commercial pilot certificate No. 31257, held by Carl S. Evers, for piloting an aircraft when it was not maintained in condition for safe operation and other violations of the Civil Air Regulations.

ORDER No. 1691 *April 24, 1942*

Dismissed the petition filed by Lewis R. Daitz for restoration of his designations of secondary and cross-country instructor in the Civilian Pilot Training Program. (Opinion and order.)

ORDER No. 1692 *April 24, 1942*

Authorized Pennsylvania-Central Airlines Corp. temporarily to suspend service at Flint, Mich., on Routes Nos. 32 and 41.

ORDER No. 1693 *April 27, 1942*

Revoked private pilot certificate No. 47005-40 of Donald U. Walker for flying aircraft not certificated as air-worthy and other violations of the Civil Air Regulations.

ORDER No. 1694 *April 27, 1942*

Dismissed petition of Ernest E. Boyer for reconsideration of refusal of the Administrator to issue him an Air Agency Certificate. (Opinion and Order.)

ORDER No. 1695 *April 27, 1942*

Affirmed Order Serial No. 1508 fixing and determining fair and reasonable rates of compensation for the transportation of mail by the Delta Air Corp. on routes Nos. 24 and 54. (Opinion and Order—Docket No. 331.)

One opinion in the matter of the compensation for the transportation of mail by aircraft applies to Orders, Serial Nos. 1696 through 1710. (Docket No. 1-406-(A)-1.)

ORDER No. 1696 *April 27, 1942*

Amended Order, Serial No. 974 fixing and determining fair and reasonable rates of compensation for the transportation of mail by Braniff Airways, Inc., over Routes Nos. 9, 15 and 50 to provide for the automatic adjustment of rates.

ORDER No. 1697 *April 27, 1942*

Amended Order, Serial No. 1380, fixing and determining fair and reasonable rates of compensation for the transportation of mail by Southern Air Lines, Inc., over routes Nos. 8 and 53 to provide for the automatic adjustment of rates.

ORDER No. 1698 *April 27, 1942*

Dismissed the rule (Order, Serial No. 1556) directing Continental Air Lines to show cause why Order, Serial No. 1045 should not be modified to provide for the automatic adjustment of rates (provided for in Order, Serial No. 1649).

ORDER No. 1699 *April 27, 1942*

Amended Order, Serial No. 1508, fixing and determining fair and reasonable rates of compensation for the transportation of mail by Delta Air Corp. over Routes Nos. 24 and 54 to provide for the automatic adjustment of rates.

ORDER No. 1700 *April 27, 1942*

Amended Order, Serial No. 62, fixing and determining fair and reasonable rates of compensation for the transportation of mail by Inland Air Lines, Inc., over route No. 35 to provide for the automatic adjustment of rates.

ORDER No. 1701 *April 27, 1942*

Amended Order, Serial No. 32, fixing and determining fair and reasonable rates of compensation for the transportation of mail by Mid-Continent Airlines, Inc., over Route No. 26 to provide for the automatic adjustment of rates.

ORDER No. 1702 *April 27, 1942*

Amended Order, Serial No. 765, fixing and determining fair and reasonable rates of compensation for the transportation of mail by Mid-Continent Airlines, Inc., over Route No. 48, to provide for the automatic adjustment of rates.

ORDER No. 1703 *April 27, 1942*

Amended Order, Serial No. 83, fixing and determining fair and reasonable rates of compensation for the transportation of mail by National Airlines, Inc., over Routes Nos. 31 and 39, to provide for the automatic adjustment of rates.

ORDER No. 1704 *April 27, 1942*

Amended Order, Serial No. 406, fixing and determining fair and reasonable rates of compensation for the transportation of mail by Northeast Airlines, Inc., over Route No. 27, to provide for the automatic adjustment of rates.

ORDER No. 1705 *April 27, 1942*

Amended Order, Serial No. 87, fixing and determining fair and reasonable rates of compensation for the transportation of mail by Northwest Airlines, Inc., over Route No. 3, to provide for the automatic adjustment of rates.

ORDER No. 1706 *April 27, 1942*

Amended Order, Serial No. 1172, fixing and determining fair and reasonable rates of compensation for the transportation of mail by Northwest Airlines, Inc., over Route No. 45, to provide for the automatic adjustment of rates.

ORDER No. 1707 *April 27, 1942*

Amended Order, Serial No. 226 fixing and determining fair and reasonable rates of compensation for the transportation of mail by Pennsylvania-Central Airlines Corp. over Routes Nos. 14, 32, and 34 to provide for the automatic adjustment of rates.

ORDER No. 1708 *April 27, 1942*

Amended Order, Serial No. 653 fixing and determining fair and reasonable rates of compensation for the transportation of mail by Transcontinental and Western Air, Inc., over Routes Nos. 2, 36, 37, 38, and 44 to provide for the automatic adjustment of rates.

ORDER No. 1709 *April 27, 1942*

Amended Order, Serial No. 563 fixing and determining fair and reasonable rates of compensation for the transportation of mail by United Air Lines Transport Corp. over Routes Nos. 1, 11, and 17 to provide for the automatic adjustment of rates.

ORDER No. 1710 *April 27, 1942*

Amended Order, Serial No. 140 fixing and determining fair and reasonable rates of compensation for the transportation of mail by Western Air Lines, Inc., over Routes Nos. 13 and 19 to provide for the automatic adjustment of rates.

ORDER No. 1711 *April 29, 1942*

Temporarily exempted Pan American Airways, Inc., from the provisions of section 401 (a) of the Civil Aeronautics Act of 1938, as amended, so as to authorize it to engage in air transportation to and from Hamilton, Bermuda, an intermediate point between New York, N. Y., and San Juan, Puerto Rico.

REGULATIONS

(Under the Regulations printed in the April 15, 1942, issue of the *Journal* Amendment 61-63 was listed. This was a typographical error. It should have been Amendment 61-33.)

AMENDMENT 14-1 *April 8, 1942*

Effective April 8, 1942:

Amend Part 14 of the Civil Air Regulations to read as follows:
Strike section 14.13.

AMENDMENT 20-44 *April 4, 1942*

Effective April 4, 1942:

Amend section 20.56 to read as follows:
Strike the words "50-mile radius" and "100-mile radius" appearing in section 20.56 (b) and insert in lieu thereof the following: "150-mile radius" and "250-mile radius," respectively.

AMENDMENT 20-45 *April 24, 1942*

Effective April 24, 1942:

Part 20 of the Civil Air Regulations is amended as follows:

1. Strike the period from the end of section 20.39 (a) and add thereto the following: "or after he has received not less than 5 hours instruction on each subject of the examination failed from a certificated ground instructor rated for such subject and presents a statement from such instructor showing the amount of instruction given and stating that he deems the applicant qualified to pass the required examination in such subject."

2. Strike the period from the end of section 20.39 (c) and add thereto the following: "or after he has received not less than 5 hours instruction on each subject of the examination failed from a certificated ground instructor rated for such subject and presents a statement from such instructor showing the amount of instruction given and stating that he deems the applicant qualified to pass the required examination in such subject."

3. Strike the period from the end of section 20.46 and add thereto the following: "or after he has received not less than 5 hours instruction on each subject of the examination failed from a certificated ground instructor rated for such subject and presents a statement from such instructor showing the amount of instruction given and stating that he deems the applicant qualified to pass the required examination in such subject."

AMENDMENT 22-4 *April 24, 1942*

Effective April 24, 1942:

Part 22 of the Civil Air Regulations is amended as follows:

Strike the period from the end of section 22.242 (a) and add thereto the following: "or after he has received not less than 5 hours instruction on each subject of the ex-

amination failed from a certificated ground instructor rated for such subject and presents a statement from such instructor showing the amount of instruction given and stating that he deems the applicant qualified to pass the required examination in such subject."

AMENDMENT 24-8 *Mar. 25, 1942*

Effective May 15, 1942:

Add a new section 24.54 to read as follows: "24.54. No person shall serve as a mechanic in connection with the inspection, maintenance, overhaul or repair of aircraft, aircraft engines, propellers, or appliances thereof, or as a parachute rigger, after May 15, 1942, unless he has in his possession, in addition to a currently effective mechanic certificate, an identification card, satisfactory to the Administrator, containing his fingerprints, his picture and his signature."

AMENDMENT 26-1 *Mar. 25, 1942*

Effective May 15, 1942:

Add a new section 26.59 to read as follows: "26.59. No person shall serve as an air-traffic control-tower operator after May 15, 1942, unless he has in his possession, in addition to a currently effective control-tower operator certificate, an identification card, satisfactory to the Administrator, containing his fingerprints, his picture, and his signature."

AMENDMENT 27-6 *Mar. 25, 1942*

Effective May 15, 1942:

Add a new section 27.29 to read as follows: "27.29. Aircraft dispatcher identification card. No person shall serve as an aircraft dispatcher after May 15, 1942, unless he has in his possession, in addition to a currently effective dispatcher certificate, an identification card, satisfactory to the Administrator, containing his fingerprints, his picture, and his signature."

AMENDMENT 51-5 *Mar. 25, 1942*

Effective May 15, 1942:

Add a new section 51.29 to read as follows: "51.29. Ground instructor identification card. No person shall serve as a ground instructor in connection with ground school subjects after May 15, 1942, unless he has in his possession, in addition to a currently effective ground instructor certificate, an identification card, satisfactory to the Administrator, containing his fingerprints, his picture, and his signature."

AMENDMENT 51-6 *April 24, 1942*

Effective April 24, 1942:

Part 51 of the Civil Air Regulations is amended as follows:

Strike the period from the end of section 51.27 and add thereto the following:

"or after he has received not less than 5 hours instruction on each subject of the examination failed from a certificated ground instructor rated for such subject and presents a statement from such instructor showing the amount of instruction given and stating that he deems the applicant qualified to pass the required examination in such subject."

AMENDMENT 53-3 *April 10, 1942*

Effective April 10, 1942:

Amend Part 53 of the Civil Air Regulations to read as follows:

1. Strike the last sentence of paragraph (a), section 53.10, which reads as follows: "This curriculum shall be designed to be completed in not less than one year", and insert in lieu thereof the following:

"This curriculum shall be designed to be completed in not less than 35 weeks and shall not require attendance for more than 8 hours in any one day, or for more than 6 days in any one week."

2. Strike the last sentence of each of sub-paragraphs (1) and (2) of paragraph (b), of section 53.10, which reads as follows:

"This curriculum shall include not less than 960 hours of instruction, and shall be

designed to be completed in not less than 8 months", and insert in lieu thereof, in each subparagraph, the following:

"This curriculum shall include not less than 960 hours of instruction, shall be designed to be completed in not less than 20 weeks, and shall not require attendance for more than 8 hours in any one day, or for more than 6 days in any one week."

AMENDMENT 61-34 *April 22, 1942*

Effective April 22, 1942:

Strike the words "July 1, 1942" as they appear in section 61.341 and insert in lieu thereof the words "July 1, 1943."

REGULATION No. 212 *Mar. 30, 1942*

Effective March 30, 1942:

"The provisions of Part 50 of the Civil Air Regulations with respect to maintaining suitable hangar and classroom space, adequate washroom facilities, and suitable boundary and obstruction lights, for use in giving flight instruction, at least equal in quality and quantity to those required for the issuance of a flying school rating and certificate, shall not apply to the Gage Flying Service while conducting its operations at Independence, California, pursuant to the provisions of its 1942 Spring Civilian Pilot Training contracts."

REGULATION No. 213 *April 4, 1942*

Effective April 4, 1942:

"The provisions of Part 50 of the Civil Air Regulations insofar as they require the maintenance of suitable night flying equipment for aircraft, boundary and obstruction lights on landing fields used in flight instruction, and adequate hangar space, shall not apply to the Shook Flying Service, while conducting its operations at Conner Field, Quartzsite, Arizona, pursuant to the provisions of its 1942 Spring Civilian Pilot Training contracts in connection with the primary and secondary courses."

REGULATION No. 214 *April 4, 1942*

Effective April 4, 1942:

"The provisions of Part 50 of the Civil Air Regulations with respect to maintaining suitable hangar space and boundary and obstruction lights at least equal in quality and quantity to those required for the issuance of a flying school rating and certificate shall not apply to the United School of Aeronautics while conducting primary and secondary instruction at Smiley Field, Welton, Arizona, pursuant to the provisions of its 1942 Spring Civilian Pilot Training contracts."

REGULATION No. 215 *April 4, 1942*

Effective April 4, 1942:

"The provisions of Part 50 of the Civil Air Regulations with respect to maintaining suitable equipment, classroom, shop, and office facilities, to accommodate its students, at least equal in quality and quantity to those required for the issuance of a flying school rating and certificate shall not apply to the Buroker-Hicks Flying Service while conducting its operations at Weeks Field, Coeur d'Alene, Idaho, pursuant to the provisions of its 1942 Spring Civilian Pilot Training contracts."

REGULATION No. 216 *April 6, 1942*

Effective April 6, 1942:

"Notwithstanding any provisions of sections 50.50 and 50.59 of Part 50 of the Civil Air Regulations to the contrary, when required in the interest of national defense and in the opinion of the administrator circumstances warrant the non-observance of such provisions, a certificate of waiver of such provisions may be issued by the Administrator."

REGULATION No. 217 *April 4, 1942*

Effective April 4, 1942:

"Notwithstanding the provisions of the Civil Air Regulations requiring a first pilot of an air carrier, prior to carrying passengers in scheduled air transportation, to have

landed at least once at each terminal, scheduled intermediate stop, and intermediate field located along the route or a part thereof on which he will pilot aircraft, any first pilot listed in Eastern Air Lines' air carrier operating certificate at the time said air carrier is authorized to commence operations at the new Baton Rouge Airport, as qualified to operate an aircraft in scheduled air transportation between Atlanta, Georgia and Houston, Texas, may operate aircraft into and out of the new Baton Rouge Airport under daylight contact conditions in such air transportation upon furnishing to Eastern Air Lines and to the Chief, Air Carrier Branch of the Civil Aeronautics Administration of the Second Region, Municipal Airport, Atlanta, Georgia, a satisfactory sketch of the new Baton Rouge Airport and a written inspection report describing its condition, construction, and surrounding terrain. Such sketch and report shall be preserved by Eastern Air Lines as specified in section 40.2611 (b) of the Civil Air Regulations for written reports and sketches of intermediate fields. Each pilot must give evidence satisfactory to the Administrator's representative of his thorough familiarity with the form and condition of the field and with the location and nature of the obstructions around it."

REGULATION No. 218 *April 11, 1942*

Effective April 11, 1942:

"Notwithstanding the provision of section 40.2611 (b) of the Civil Air Regulations to the contrary, requiring a first pilot to make one one-way trip without passengers within the six months immediately preceding his qualification for the route, pilots S. S. Snelser, G. H. White, and H. A. Corcoran are not required to comply with such provision prior to serving as first pilots over routes, listed in Pennsylvania-Central Airlines' operating certificate, between Washington, D. C. and Norfolk, Virginia, Washington, D. C. and Detroit, Michigan, and between Washington, D. C., Buffalo, New York, and Pittsburgh, Pennsylvania."

Accidents

(Continued from page 116)

in the vicinity of the Whittle Springs Hotel, which is located only a few miles from the airport, observed the aircraft approaching in a descending attitude. The aircraft continued to descend until it was close to the hotel and the pilot then executed a steep, climbing, left turn of 180 degrees. He levelled out and flew toward the northeast for a distance of about 1,200 feet and began another steep, climbing left turn. During the turn the aircraft stalled at an altitude of about 200 feet. It immediately fell into a left spin and completed one turn before striking the ground in an almost vertical attitude.

Investigation disclosed no evidence of failure of the control system or structure or of malfunctioning of the engine during the flight.

Probable cause.—Failure of pilot to maintain flying speed while maneuvering at low altitude.

Contributing factor.—Inexperience of pilot.

Coal Used in Building Planes

Coal derivatives help make plastics for wings, fuselages, fairings, radio antenna masts, trim tabs, control pulleys, pilot switch panels, cabin ventilators, and aerial cameras.

Status of Parts of the Civil Air Regulations and Regulations of the Administrator of Civil Aeronautics

As of May 1, 1942

All persons affected by these Regulations, including those preparing for examinations for certificates may obtain required Parts of the Regulations from the Publications and Statistics Division, Civil Aeronautics Administration, Washington, D. C., without charge.

ONLY PARTS NEEDED SUPPLIED FREE

For example, *pilots* are governed in general by Parts 01, 20, 60, and 98; *aircraft mechanics* by Parts 01, 04, 15, 18, 24, 98, and Section 60-32; and *aircraft engine mechanics* by Parts 01, 04, 13, 14, 18, 24, and 98. It should be remembered that individuals are entitled to receive free of charge only those portions of the Regulations which directly govern the activity in which they are engaged and this activity must be definitely stated when request is made.

HOW TO OBTAIN PARTS, AMENDMENTS, AND MANUALS

Those persons not affected by the Regulations, but desiring all or any part of the

Regulations for other purposes, may obtain them as follows: Those Parts on which a price is listed in the tabulation below are on sale by the Superintendent of Documents, U. S. Government Printing Office (shown as G. P. O. in table), Washington, D. C., and are not available for free distribution except as stated in the first paragraph.

Eventually, all Parts will be placed on sale; meanwhile, Parts not yet on sale (carrying remark in tabulation below "order from C. A. A. only") may be obtained without charge from the C. A. A. upon demonstration of valid interest on the applicant's part.

ALL AMENDMENTS TO THE REGULATIONS, AND NOTICE OF NEW PARTS, ARE PRINTED IN THE CIVIL AERONAUTICS JOURNAL, AS RELEASED.

The tabulation below carries in the right-hand column the numbers of all effective amendments to each Part issued subsequent to its publication. Parts ordered from C. A. A. include all effective amendments,

but when Parts are purchased from G. P. O. amendments must be requested separately from C. A. A.

Civil Aeronautics Manuals supplementing certain Parts with detailed interpretations of their respective provisions are issued. They are numbered the same as the Parts they supplement, and those Parts accompanied by Manuals carry appropriate notations. All Manuals are obtained from C. A. A. only, without charge.

PARTS CANCELLED AND UNASSIGNED

Cancelled Parts 00, and 03, now incorporated in Part 01; cancelled Part 23, now incorporated in Part 51; and cancelled Part 25, now incorporated in Part 24. Parts 90-96, inclusive, cancelled. All other Part numbers not shown are unassigned.

Bound volumes of the complete Civil Air Regulations are no longer available. Parts and amendments are punched for filing in loose-leaf binders.

Civil Air Regulations

PART NO.	TITLE	DATE	REMARKS	PRICE	EFFECTIVE AMENDMENTS
01	AIRWORTHINESS CERTIFICATES	11-1-41	In stock at C. A. A. and on sale at G. P. O.	.05	01-1 ¹ Spec. Reg. Ser. 200.
02	TYPE AND PRODUCTION CERTIFICATES	3-1-41	In stock at C. A. A. and on sale at G. P. O.	.05	
04	AIRPLANE AIRWORTHINESS (MANUAL 04, 2-1-41 ¹)	4-1-41	In stock at C. A. A. and on sale at G. P. O.	.15	116, 120, 04-3 thru 04-10, ² 04-11, 04-12, 04-13. ³
13	AIRCRAFT ENGINE AIRWORTHINESS (MANUAL NOT ISSUED)	8-1-41	In stock at C. A. A. and on sale at G. P. O.	.05	
14	AIRCRAFT PROPELLER AIRWORTHINESS (MANUAL 12-1-38)	11-15-40	In stock; order from C. A. A. only		14-1.
15	AIRCRAFT EQUIPMENT AIRWORTHINESS (MANUAL 15, OUT OF STOCK)	11-15-40	In stock; order from C. A. A. only		15-1. ⁴
16	AIRCRAFT RADIO EQUIPMENT AIRWORTHINESS (MANUAL, 2-12-41) ⁵	2-13-41	In stock at C. A. A. and on sale at G. P. O.	.05	
18	MAINTENANCE, REPAIR, AND ALTERATION OF CERTIFIED AIRCRAFT AND OF AIRCRAFT ENGINES, PROPELLERS, AND INSTRUMENTS. (MANUAL 18, 6-1-41, OUT OF STOCK)	6-1-41	In stock; order from C. A. A. only		
20	PILOT CERTIFICATES	5-1-40	In stock at C. A. A. and on sale at G. P. O.	.05	63, 65, 67, 75, 82, 83, 87, 88, 99, 101, 107, 110, 111, 112, 115, 117, 118, 125, 126, 127, 20-22 thru 20-43.
21	AIRLINE TRANSPORT PILOT RATING	11-15-40	In stock; order from C. A. A. only		87, 101, 117, 21-4, 21-5.
22	LIGHTER-THAN-AIR PILOT CERTIFICATES	9-15-41	In stock at C. A. A. and on sale at G. P. O.	.10	22-1 thru 22-3.
24	MECHANIC CERTIFICATES	5-1-40	In stock at C. A. A. and on sale at G. P. O.	.05	44, 61, 73, 75 87 ⁶ 109, 24-7, 24-8. ⁷
26	AIR-TRAFFIC CONTROL TOWER OPERATOR CERTIFICATES	2-3-42	To be available soon at C. A. A. and on sale at G. P. O.		21-6. ⁸
27	AIRCRAFT DISPATCHER CERTIFICATES	7-15-40	In stock at C. A. A. and on sale at G. P. O.	.05	74, 75, 87, 27-4, 27-5, 27-6, ⁹
40	AIR CARRIER OPERATING CERTIFICATION	11-1-40	In stock at C. A. A. and on sale at G. P. O.	.05	85, 90, 102, 129, 133, 40-6, ¹⁰ 40-7, 40-8 thru 40-10.
50	FLYING SCHOOL RATING (MANUAL 50, 12-40 ¹¹)	11-1-40	In stock at C. A. A. and on sale at G. P. O.	.05	87, 113, 50-3, Reg. Ser. 216.
51	GROUND INSTRUCTOR RATING	5-1-40	In stock at C. A. A. and on sale at G. P. O.	.05	75, 87, 128, 51-4, 51-5. ¹²
52	REPAIR STATION RATING (MANUAL 52, 2-41)	5-1-40	In stock at C. A. A. and on sale at G. P. O.	.05	75, 84, 87.
53	MECHANIC SCHOOL RATING (MANUAL 53, 5-40)	9-15-40	In stock at C. A. A. and on sale at G. P. O.	.05	75, 87, 53-3.
60	AIR TRAFFIC RULES (MANUAL 60; PART 1, 12-1-40; PART 2, 8-1-40; PART 3, 12-1-40)	10-4-40	In stock at C. A. A. and on sale at G. P. O.	.10	80, 90, 93, 102, 104, 119, 120, 121, 127, 135, 60-25 thru 60-44, 60-46 thru 60-48, 60-50 thru 60-58, 60-59, 60-60, ¹³ 60-61 thru 60-63, Spec. Reg. Ser. 177.
61	SCHEDULED AIR CARRIER RULES	1-1-41	In stock at C. A. A. and on sale at G. P. O.	.05	91, 94, 97, 102, 115, 120, 122, 129, 130, 132, 134 61- 17, thru 61-19, 61-20, ¹⁴ 61-21 thru 61-32, 61-34, Spec. Reg. Ser. 182, 188, 192.
66	FOREIGN AIR CARRIER REGULATIONS	4-1-15-42	In stock at C. A. A. and on sale at G. P. O.	.05	
98	DEFINITIONS	11-15-40	In stock; order from C. A. A. only		98-1.
99	MODE OF CITATION OF REGULATIONS	11-15-40	In stock; order from C. A. A. only		

Regulations of the Administrator

501	AIRCRAFT REGISTRATION CERTIFICATES	11-1-41	In stock; order from C. A. A. only	
510	GENERAL REGULATIONS, WASHINGTON NATIONAL AIRPORT	9-26-41	In stock; order from C. A. A. only	
511	GENERAL AERONAUTICAL RULES FOR THE WASHINGTON NATIONAL AIRPORT	9-26-41	In stock; order from C. A. A. only	
525	NOTICE OF CONSTRUCTION OR ALTERATION OF STRUCTURES ON OR NEAR CIVIL AIRWAYS	11-1-41	In stock; order from C. A. A. only	
A31	SEIZURE OF AIRCRAFT	12-8-41	In stock; order from C. A. A. only	
600	DESIGNATION OF CIVIL AIRWAYS	3-1-42	Not published (See Air Navig. Radio Aids)	
601	DESIGNATION OF AIRWAY TRAFFIC CONTROL AREAS, ETC.	1-15-42	Not published (See Air Navig. Radio Aids)	1, 2, 3. 1 thru 7.

¹ Amendments issued as C. & I. Release No. 50, 6-3-41, and S. R. Release No. 97, 2-23-41.

² Amendment No. 1 issued as S. R. Release No. 62, 8-12-41.

³ Amendment 4-14-41 issued as S. R. Release No. 77, 11-13-41.

⁴ Effective date suspended until 3-1-42 by Order No. 1490.

⁵ Effective 7-1-42.

⁶ Effective 5-15-42 (No copies available. Requires identification cards. Consult C. A. A. Inspector for specific provisions of this amendment.)

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